UTB Systems Center Newsletter

Fourth Quarter **Fiscal Year 1997**

The UTB Systems Center Newsletter is an authorized publication of news and information concerning the UTB community. Editorial content is unofficial and not authority for action. The views and opinions expressed herein are not necessarily those of the Department of Transportation or the United States Coast Guard. MKC Tom Gigliotti, Editor.

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CORRECTIONS TO THE 2nd/3rd QUARTER NEWSLETTER

The following corrections were noted by the field in the last newsletter:

The Kim Hot Start replacement unit had an incorrect part number. The correct part number is CP115112-000.

The stock number listed for the forward searchlight is incorrect. The correct stock number is 6230-00-215-6362. The 01 was incorrect.

FROM THE PILOTHOUSE

By LT John Homan, School Chief

IMPROVEMENTS IN FY97

Fiscal year 1997 UTB STANTEAM report is included at the end of this issue. Take a few minutes and review it. For the year, 65 of 86 UTBs (76%) were assessed as Ready for Sea (RFS). This is an improvement over fiscal year 1996, which had only 67% of the UTBs RFS. Most units not obtaining a RFS rating showed a good faith effort to do the right thing and were very close to reaching the RFS goal. However, surprisingly, there are still small pockets of resistance to the program out there and, frankly, I'm at a loss to understand why. COMDT established equipment configuration, performance parameters, inspection standards, and crew certification procedures for a reason; that is, to ensure the UTB fleet and crews stay reliable and safe. Remember this, when corners are cut in UTB

maintenance and crew training, the risk of accidents occurring are increased significantly. BELIEVE IT!! Don't make the mistake of thinking you're immune to tragedy.

STANDARDS ARE APPROPRIATE

In my previous assignment as UTB resource manager, I became concerned that the performance parameters and inspection standards established for UTBs were unrealistic. This concern was a result of numerous complaints from the field. I convened at least two short conferences, in addition to countless meetings with representatives from ELC, both MLCs and COMDT (G-SEN) to discuss the issue. In the end, it was determined that the existing performance parameters and inspection standards were appropriate. The fact that we are seeing a higher percentage of UTBs RFS, and most others very close to being RFS, is a strong indication that the performance parameters and inspection standards are attainable.

THE TRUE PICTURE

In the past, I've been asked "why can't the UTB STANTEAM cut units a break if their UTB is close to being RFS?" The UTB STANTEAM owes the unit and its operational commander an accurate assessment of the materiel condition of the UTB. We use a "go/no go" philosophy when assessing the materiel condition of the UTBs. In other words, a UTB is either RFS or it isn't RFS. Furthermore, it's my belief, that if the STANTEAM fails to identify problems, we, the STANTEAM, become part of the problem. I ask each of you, from CO/OICs down to the newest seaman apprentice, to protect your resources by following established policy.

MANUAL REVISIONS

The UTB Systems Center (UTBSC) staff recently reviewed and submitted comments to COMDT (G-OCS) on the draft revisions to the Boat Crew Seamanship Manual. The manual is quite extensive, combining the Auxiliary Seamanship Manual with the existing BCSM. In the next few weeks, we hope to put the finishing touches on the draft revision to the MLB & UTB Standardization Manual, COMDTINST M16114.24. This has been a joint effort of COMDT, and the MLB and UTB STANTEAMs. Stay tuned.

BOATALT 95

As of this issue, Districts One, Eight and Nine are the remaining districts to have BOATALT 95 installed. District Eight installations should be completed sometime in the 2nd quarter (FY98). It's not yet been determined which district will be next for the installation.

KUDOS

Finally, I want to congratulate the personnel at Station Fort Macon, NC. Earlier this year, this crew had both of their UTBs RFS upon arrival of the STANTEAM. Furthermore, they had no major deficiencies on either boat. The success of this unit is attributed to the dedication of every individual at the station. **WAY TO GO!**

NEWS FROM THE ROAD

By CWO Bob Bennington

With the end of the fiscal year the "report card" on the units visited by STANTEAM is due. While we didn't give out straight A's all year, on the whole you made the honor roll!

The year included 63 stations visited with 86 UTB's inspected. Boats "ready for sea" at the end of the three day visit were up from 67% in 1996 to 76% in 1997. This increase in ready for sea represents an additional 21 boats. To all of you that are on the honor roll, good job.

So, who was the best? While it would not be fair to pick out one unit for the year as the best, there are a number of honorable mentions. All the units in Groups San Francisco, Southwest Harbor, and Cape Hatteras were found ready for sea. Station Fort Macon had no restrictive discrepancies at the beginning of the visit on either of its' two boats. The only unit to boast that claim all year! MSO Philadelphia, the only MSO to own 41's, brought their two boats back from being some of the worst to two of the best!

Another shining star in the fleet was found at Air Station Kodiak. Their ATB (aviation training boat) was ready for sea and being maintained by a total crew of SEVEN!

Units that shined in drills included Stations Charleston, Carquinez, San Francisco, Gloucester,

Juneau, and Fort Macon. All had great training programs and super crews!

That brings us to the 21 boats not ready for sea. While this number does not sound that high it still represents a quarter of the boats that we looked at. Still, this number is down from a third of the boats not ready for sea in 1996. So what happened? If all of the boats were supposed to be ready for sea on the first day of the visit, why did we leave two days later with a quarter of the boats not ready for sea? Examples of the restrictive discrepancies were: life raft inspection dates were expired, compass deviations as great as 30 degrees, exhaust leaks, inoperative engine alarms, missing exhaust lagging, and fluid leaks, both fuel oil and lube oil.

Well, that's the good and the bad of it. For me, it was a year of travel (28 weeks worth), in that time I learned a lot about 41' UTB's, even more about leadership. I look forward to the new visit year and, as always, I encourage all of you to keep your boats ready for sea and your crews ready for ops!

PREVENTATIVE MAINTENANCE (PMS)

By MKC Tom Gigliotti

Lets discuss PMS on the 41' UTB. It is apparent, through the materiel inspections that we are conducting, that several PMS items are being completed incorrectly or not at all. In some cases, unit engineers are surprised that maintenance is required for a particular item. Read the PMS book. There are several units that are giving PMS sheets out on a weekly basis listing the maintenance to be completed and giving a brief description of what's supposed to be accomplished, but it is not being done correctly. This results in the PMS book sitting on the shelf and the PMS being completed incorrectly or with minimum accuracy according to the MPC card.

Lets discuss a couple of maintenance items that are often overlooked or incorrectly completed:

PMS A-W-001 Underway Operational Check

This PMS requires the EPO, or senior engineer if the EPO is unavailable, to get the boat underway and check all systems. What we are finding is that this PMS is not being completed because the EPO feels he is too busy to get underway. The fact that the PMS allows for the senior engineer to get underway instead is often overused so the EPO can stay ashore. The EPO, to be effective, should occasionally get underway. If not, problems with the engines and equipment are being overlooked or lived with by the junior personnel.

PMS R-M-002 PKP Fire Extinguishers

The PMS is being partially completed at most units. On the PKP extinguishers, the whole extinguisher is being weighed instead of the CO2 canister. The PMS calls for taking off the CO2 canister, weighing it, and recording this weight on the tag. If the weight of the CO2 cartridge is ¼ of an ounce or less than the weight stamped on the canister, than it must be replaced.

PMS A-M-003 Inspect and Clean Bilges

For the most part, it appears few know this maintenance card even exists. When we inspect the bilges they have heavy salt deposits, excessive debris, and show obvious neglect. The PMS calls for a mild soap and water wash down monthly. According to the MPC card, this PMS is completed by a FN/SN. Don't just wait to clean them before a STANTEAM visit or other inspection, do them monthly.

WINDSHIELD WIPER MOTORS

By MK1 Jeff Zaner

The windshield wiper motor has a new look and part number. If you've received a new motor you may have noticed that the motor, when connected using the directions provided, runs very fast. To slow it down, attach the hot wire to the "L" terminal and the ground to a mounting bolt.

LEADERSHIP AND TRAINING

By BM1 Phillip Brame

I am new to the STANTEAM. Some of you may remember me from COXN "C" school and BM "A" school. I would like to address you senior Boatswain's Mates out there on the subject of leadership and training, and its importance to the small boat community.

As senior Boatswain's Mates, we are the most experienced trainers at the deck plate level. We are responsible for the training of boat crewmembers and setting an example for others to follow, whether we realize it or not. So it is important that we lead by example. We shouldn't just tell the trainees how to take a boat in side tow, we need to get out there and show them how it's done. It is much better for them to make a mistake with you onboard than to get into a "fix" with no one to turn to for help.

As an instructor here at UTBSC, there has been no greater reward than taking a group of students that can't navigate Wormley Creek, and four weeks later these same students are successfully completing a navigation practical. This practical consists of a ten mile transit, five turns (ten degrees or more), no more than two hundred yards either side of the intended track and arriving within five minutes of the ETA.

For you coxswains out there in the field, it is just as good a feeling when the coxswain you have trained does a great job on a SAR case or other boat evolution and you can say "I trained them." Set your crews up to succeed, to do things right. You can teach the less experienced and show them what works and what doesn't. Just by being out their with them shows them that you are interested in their training. We can talk about leadership all we want, however we must lead the way by doing.

If the STANTEAM comes to your station, you, the senior Boatswain's Mates, are going to run a drill. I cannot think of a better opportunity to shine. But if you shine, and your subordinate boat crewmembers are not doing so well, that reflects badly on you. The only way to find out who needs practice is to get them underway yourself, don't just take someone's word. Train with the attitude "I am no better than anyone else but as good as any there is."

I graduated from COXN "C" school and MLB school. I remember my instructors very well for the professionalism and dedication they displayed. We must all strive to leave the same impression with the younger boat crewmembers that will someday take our place.

ENGINE GAUGE MARKINGS

By MK1 Troy Hascher

We have seen various configurations and received numerous questions from the field concerning red lining the engine gauges.

The Naval Engineering Manual (COMDTINST M9000.6), Chapter 223, Section G, states "To provide a ready reference for the boat operators, boat instrument panel gauges should be marked to show dangerous operating ranges. All units operating inboard powered boats shall be sure that the gauges on the instrument panel are marked as shown in Table 223-4. For engines not listed in the table, consult appropriate manufacturer's instruction book." The parameters for the VT-903M are not listed in the table. The following are the manufacturer's parameter ranges:

Engine water temperature:

Red Line	185°F and up
Green Line	175°F to 185°F

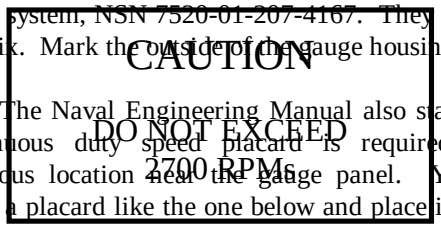
Engine Lube Oil Pressure:

Red Line	0-30 PSI
Green Line	30-65 PSI

Marine Gear Oil Pressure:

Red Line	220 PSI and up
Green Line	190-220 PSI

You can purchase Uni-paint markers through the stock system, NSN 7520-01-207-4167. They come in a set of six. Mark the outside of the gauge housing.



The Naval Engineering Manual also states that a continuous duty speed placard is required in a conspicuous location near the gauge panel. You can fabricate a placard like the one below and place it on the console. It is a caution placard, so it should be red.

HF RADIO COVER

By BMC John Buchanan

We finally have the information on the protective cover for the new HF radio. The cover is available through the Hooleon Corporation, 260 Justin Drive, Cottonwood, Arizona. Their phone number is 1-800-937-1337. Tell them you need a cover for the RAY-152 transceiver. When we bought them, the cost was $18.95 (plus shipping).

BILGE ALARMS

By MKC Tom Gigliotti

The maintenance for the loudhailer, EE-W-002, has the bilge alarms being tested as the last step of the PMS. This MPC card doesn't specifically apply to the new loudhailer but maintenance still must be done. We are currently working on new MPC cards for this loudhailer and other new electronic items. In the mean time, follow the current card as best as you can.

When we inspect UTBs, we very often find that the bilge alarms don't work. This boils down to a restrictive discrepancy. Don't wait until we find this, it should be checked weekly as per the PMS card. With the new loudhailer, after activating the bilge alarm and resetting it, you have to wait until the screen goes blank before testing the next one, usually about five minutes.

Another thing we are finding is that as soon as the UTB gets underway, the loudhailer is switched off of the alarm function. This defeats the purpose of having an alarm. The loudhailer should remain in the alarm mode until another function is needed and then returned to alarm when you are finished.

We are currently evaluating an independent bilge/fire alarm for the boat that will remove it from the loudhailer, but that could be a little time in getting to the field.

DETERMINING A SAFE TOWING SPEED

By BM1 Charles H. Howard

When the 41UTB STANTEAM arrives at your unit we administer three tests to the crew. In the Coxswain test, we ask the following question: "What is the formula to determine the safe towing speed of a disabled vessel?" This is one of the questions asked which is rarely answered correctly.

This article will discuss:

1) Why the safe towing speed is part of the small boat towing policy as outlined in The Boat Crew Seamanship Manual,
2) What this formula is, and
3) When to apply it.

During any towing evolution, the primary concern is the safe-guarding of life and property. Nearly every year Coast Guard small boat crews have damaged, capsized, and/or sunk private boats during towing evolutions. Some of these instances have resulted in injury to personnel and even loss of life. The primary reason for these mishaps is inappropriate towing speed.

The boats we tow are usually one of two basic hull designs - the displacement hull and the planning hull. Both types of hulls fall under the safe towing speed formula.

Displacement hulls, such as sailboats, are designed to displace water as they move through the water. Displacement hulls do not plane on top of the water like a planning hull vessel does. The maximum planning speed a displacement hull vessel will travel through the water is determined by the length, in feet, of the hull at the water line (LWL). This maximum speed is known as the displacement vessel's hull speed. If the displacement vessel exceeds it's designed hull speed, the hull will attempt to plane, and since it can't plane, it will fall off to one side or the other depending on wind, sea conditions, internal vessel trim, etc. This falling off to one side or the other because the vessel has exceeded it's hull speed, is known as yawing. This yawing, combined with an adverse sea state, can result in a capsized vessel.

The formula used to determine the hull speed of a displacement hull vessel is 1.34 times the square root of the LWL. This formula only determines the maximum speed a displacement hull vessel can be towed at before it begins to yaw. To add a safety margin to this hull speed, multiply the hull speed by .10, subtract this from the hull speed and this will give you the displacement vessel's Safe Towing Speed.

Example: You must tow a 49 foot Sailing vessel. What is the vessel's hull speed and it's Safe Towing Speed.

1.34 X Square Root of 49(ft) = Hull Speed

1.34 X 7 = 9.38 Knots (Hull Speed)
9.38 X .10 = 0.938
9.38 - 0.938 = 8.442 (8.4) Knots (Safe Towing Speed)

Planing Hull vessels are designed to travel at a much greater speed by planing on top of the surface of the water. However, the Safe Towing Speed formula still applies. The issue is not whether or not this boat can be towed safely at a higher rate of speed, the issue is whether or not the deck fitting being used as attachment points can withstand the increased strain of the towing ensemble.

ARE YOU READY FOR A CHALLENGE??

By BM1 Mary Watson

Those who can, do... Those who can do it better, TEACH!

UTB Coxswains and Engineers listen up!! Have you "Been there, done that, seen everything?" Prove it! Put your experience and expertise to the challenge. Next time you send in that ADC, put UTBSC at RTC Yorktown at the top of the list.

The UTB Systems Center is arguably one of the best sources for information on the 41' UTB. We are the home for the UTB Standardization Team, Coxswain "C" School, BM "A" School, COXN, CREW and ENG 41 reserve courses.

We have a staff of BM and MK instructors that provide over 300 students per year the opportunity to learn and practice skills through the following 5 curriculums:

Boatswain's Mate "A" School.
We provide reserve personnel with some basic skills that normally take months of drills to receive. From performing boat crew duties to rigging boatswain's chairs, from Boatswain Pipe to 155mm lantern troubleshooting, we give new Boatswain's Mates a little taste of many tasks. Personnel who satisfactorily complete "A" school EARN their BM designation. Those that come to the school boat crew qualified and pass the E-3/4 MRN, and NAVRULS EOCT may obtain their E-4 rank upon graduation.

Coxswain "C" School.
Open to qualified boat crewmembers who are progressing towards a coxswain qualification at their unit. An intense 4 week course that sharpens the students boat handling and navigation skills as well as their ability to manage themselves and their crew under stress.

Coxswain 41 School.
Reserve personnel are given a "crash" course on boat handling and navigation specific to the 41' UTB. This class is similar to the Coxswain "C" School, compressed into 2 weeks.

Crewman 41 School.
Another 2-week reserve class to refine boat crewman skills specific to the 41' UTB.

Engineer (UTB) School.
A 1 week class on Preventive Maintenance, BECCE drills, and UTB familiarization for reserve engineers.

If you have personnel who are in need of training, submit that Short Term Training Request (CG-5223) and get them into one of our classes.

Well that's the "What's in it for them," here's "What's in it for you..."

The majority of the training we provide is underway. There are ten 41' UTB's assigned to the school. Each boat is assigned a Coxswain and Engineer "Owner" team. These teams work together underway to provide each student with a well-rounded opportunity at cross-training. We have some of the best boat handling engineers and BECCE trouble shooting coxswains in the Coast Guard.

If you think you're a good boat coxswain or boat engineer now, wait until you see what an average of 475 underway training hours a year does to your skills. (If you think getting underway from the pier is the best part of the day, this is the place to be). You WILL be the expert of the 41' UTB.

Need administrative experience? All instructors rotate through "Class Advisor" positions for each class (12 to 32 students). Admin., travel, pay, discipline, liberty, and all the other little day to day problems life generates, but, only for 1 to 7 weeks at a shot. "All the

cosmic powers of the universe... in a little itty-bitty package."

Education opportunities. MKs get plenty of time to study during "navigation days." Boatswain's Mates only have to walk across the lane to get to the course writer. There's a library and a learning center on the training center. Many personnel also take advantage of opportunities for higher Education during their tour. MK "A" school, ATON, Marine Safety, and SAR school are also here on base, just to name a few.

Are you tired of Port/Starboard or 1/3 Duty? We currently stand 1 in 6 duty for SAR response (and have the potential for 1/10 or better). Underway during duty is your choice (with few exceptions). The actual SAR load is less than 25 cases per year. Law Enforcement duties for the UTBSC staff is nonexistent.

Keeping fit is easy here at Yorktown. You can jog through the battle fields of Yorktown (just watch out for the deer), swim in an olympic size indoor swimming pool, work out on free weights, nautilus machines, or aerobic gismos and gadgets (including a scheduled step aerobic dance class). There's a softball field, basketball, volleyball, and tennis courts available, as well as a bowling alley.

Like a little more? How about nearby Busch Gardens, Water Country USA, historic Yorktown Battlefields and Jamestown; or Kings Dominion, Virginia Beach, Washington DC, camping, fishing, hunting, skiing, hiking, football, baseball, NASCAR, hockey, all just a short drive away.

The Coast Guard needs you to pass on your experience, the lessons you have learned, to the future Coast Guard. You learned from someone, it's your turn to pass on the torch. Check out the Coast Guard Personnel Manual (COMDTINST M1000.6A), Chapter 4.E.6, to see if Instructor Duty is right for you.

FIRESLEEVE

By MK1 Jeff Zaner

On a recent trip to the 9th District, I was approached with a question about the proper equipment to use to seal a firesleeve around the hose. I looked at the Code of Federal Regulations which referenced SAE standards. With a little help from the folks in the "M" field, I think I have an answer.

If you follow the guidelines set forth in the Aeroquip Fluid Products Handbook, the following parts are needed to properly install their brand of firesleeve. Most units are currently using Aeroquip firesleeve.

End Dip	AE13702-003	Procure locally
Clamping Tool	F2636	5120-01-127-0756
Clamp, 3/8"	FF9217-0622S	4730-01-116-4056

The end dip is used to prevent the firesleeve from wicking fluids into the firesleeve material.

The use of plastic wire ties is not acceptable and the use of worm-screw hose clamps should only be used as a temporary repair until it can be properly banded.

The following is a stock number listing for Aeroquip firesleeve:

AE102-18 (1" ID)	5640-00-507-4104
AE102-24 (1 ½" ID)	5640-00-540-5874

If you are using a different brand of firesleeve, consult the manufacturer for the proper way to secure it in place.

ENGINE ALARMS-FIX THEM!

By MKC Tom Gigliotti

One recurring problem we are finding in the field is the engine alarms aren't working when we test them during the full power trial. We have seen a number of discrepancies; from the alarm not working, indicating the wrong alarm, bell with no light, or all the lights when you hit one button. Problems like this should be corrected as they occur, not just because a STANTEAM visit is taking place.

This is an easy system to test, and if it doesn't work, have the EM's fix it. If an alarm goes off during night operations and the light, either doesn't work or more than one light comes on, the process to control the casualty can be delayed.

REAR MAIN SEALS

By MKC Tom Gigliotti

There has been some discussion about the correct rear main seal on the VT-903M engines. We called Cummins marine division and found out that the only seal authorized is the single lip seal (part number

218539, NSN 5330-01-132-6645). This seal can be used with or without the wear sleeve, as the BOSS manual states. The wear sleeve is a newer style than the previous version. It is thinner and allows for use with the single lip seal. You only need to install the sleeve on the flywheel adapter if it is damaged. The part number for the wear sleeve is 3006741, NSN 2815-01-163-0803. If you have any questions, you can either call me or the Standard Boat Section at the ELC, (410)762-6182/7.

NEW HELMET

By MK1 Jeff Zaner

The Pro-Tech helmet is no longer carried by Lifesaving Systems. The replacement helmet, the "Cascade", offers a safety rating that the Pro-Tech didn't have. So if you're replacing helmets, you may want to consider replacing all of the Pro-Tech helmets right away and have the better product available for your crews.

Life Saving Systems sells the helmet for $49.00. It's a little more expensive than the Pro-Tech, which was sold for $35.00.

CWO Todd, G-OCS-2, is in charge of the Rescue and Survival Systems gear and he says that the new Cascade helmet is the helmet that units should be buying.

The part number for the helmet is LCS #458.

MARINE CLOCK

By MK1 Troy Hascher

The marine clock stock number listed in the BOSS manual has been discontinued. The new number is 6645-01-229-2497. The clock is a 8.5" round, black, 3 scale, 24 hour clock. It is manufactured by Chelsea Clock Company (617-884-0250), 284 Everett Avenue, Chelsea, MA., and sells for $154.21 each.

EXHAUST LEAKS

By MK1 Jeff Zaner

I've received a few calls about the gaskets used on the exhaust system flex pipe. The item listed in the BOSS manual (figure 259, item 2, NSN 5330-01-425-0892) is a little different than the gasket we had before. It doesn't have bolt holes to hold it in place and it's made of copper, instead of the normal fibrous material. You install it by inserting a couple of bolts around the bottom of the flange, drop in the gasket, insert the rest of the bolts and tighten them up. The UTBSC has been using a similar gasket on our UTBs, made by Flexitalic, for over a year. These gaskets have yet to fail and in most cases, can be used over again.

41' UTB PROTOTYPES

By MKC Tom Gigliotti

I just thought I would spend a couple of minutes to let you know what kind of projects we have in the prototype stage for the 41' UTB.

First let's talk about the hydraulic steering installation. The UTB Systems Center currently has one boat with the hydraulic steering installed as a prototype and is getting ready to install it on a second (different series) UTB. This will completely replace the cable steering which is obsolete. There is a helm pump, mounted under the console, and two sets of hoses leading back to the well deck. There is a bronze ram with a stainless steel rod which actuates the tiller arms. It takes about the same effort and number of turns of the helm as the cable did to turn the rudder. The only difference is that the helm doesn't return to amidships on it's own when you release it. Funding for this replacement has already been approved and a BOATALT should be forthcoming in the near future.

We are also prototyping another rub rail fastener. The new fastener actually gets glued to the hull. The testing phase for this prototype is still going on. So far there have not been any problems with this installation. The benefit of this type of application is that units will be able to replace broken studs without costly welding or haul out.

We just completed the prototype on the bilge/fire alarm panel. The installation of a smoke detector in the pilothouse along with an independent alarm panel will remove the alarm from the loudhailer. When an alarm is indicated, the blue light and horn will be activated. Also along with this prototype, the hand operated valves are remove from the two bilge pump systems. The swing check valve is replaced with a spring loaded check valve.

We are about to start testing a replacement fuel oil system. This will require some welding on Bulkhead

10 for the installation of flanged connections. The new system will have three hoses installed for each engine, two supply and one return. The stripping pump is removed and replaced with a dockside FLOC pump, which can be connected to the tank with quick-disconnect fittings. With the replacement system, the ability to draw suction from one tank for both engines is removed. The tube mounted in the return on Bulkhead 10 is being removed. The return will go back directly into the tank. We are looking forward to installing and prototyping this system. Hopefully it will eliminate several leak points.

Well, that's about it for now. I'll keep you updated on the progress of these and any future prototypes as they come along.

POWER TAKE-OFF LUBRICATION

By MK1 Jeff Zaner

Does my PTO need a zerk fitting in the end of the shaft? To answer this question, I talked with Dean Fiorentino at Twin Disc. He said that the modern PTO doesn't need a grease fitting in the shaft because it uses a sealed pilot bearing.

So how do you find out what you have? Take the PTO off and look. If the bearing is the old type, the bearing will be exposed.

What happens if you just decide to stick a zerk fitting in the shaft and grease it anyway? You change the passageway into a piston. As you pump the grease into the fitting, it puts force on the bearing. After enough force is present, the bearing will start binding and eventually fail.

VT-903M BULLETIN ERROR

An error in the Cummins Operation and Maintenance Manual for the VT-903M engines was recently brought to our attention (Bulletin Number 3379075-05). On page 2-27 (Operating Instructions), the part number listed for the 1:1 ratio injector levers is incorrect. The part number should be 211399 vice 211319. Thanks to MKC Smith from Group St. Petersburg for bringing this to our attention.

TEAM COORDINATION

TRAINING (TCT) CORNER

By BM1 Graham Bostic

SITUATIONAL AWARENESS

This module of TCT helps individuals to detect when awareness is lost and how to regain it. We'll address "Trapping Errors" and "Breaking Poor Judgment Chains."

Simply put, situational awareness is knowing what's going on around you. Between 1987 and 1992, 40% of all navigational mishaps involving Coast Guard boats and cutters were due to the loss of situational awareness. In any given situation be alert to clues of diminishing situational awareness:

- That gut feeling
- Confusion
- No ones watching or looking for hazards
- The use of improper procedures
- Departing from regulations
- Unresolved discrepancies
- Ambiguity

Trapping errors is a key mechanism to avoiding mishaps. Regulations and SOPs are implemented to help control known risks but they are not fail-safe! Team members must be able to identify human error and be empowered to take corrective action.

Imagine the coxswain of a 41' UTB needs to transit an unfamiliar inlet but doesn't have the proper chart. The lack of knowledge limits his/her ability to deal with the hazards of that inlet. To trap this mistake and possibly prevent a "weekend ruining event", the coxswain, prior to entering the inlet, needs to ask "is our objective worth the risk of grounding on that shifting shoal?" At this point, the coxswain or boat crewmembers still have the opportunity to "trap" the mistake and avert an inlet grounding.

Hopefully they will come up with another alternative but at least they will have taken the opportunity to trap the errors and brake that error chain.

"Have A Clue, Listen To Your Crew!"

MATERIAL INSPECTION JOB AID

BY MKC Tom Gigliotti

I hear a lot of complements from the field on the Job Aid I put together for the 41' UTB. I would like to thank everyone for their comments and support in keeping this reference accurate and helpful.

To that end, I plan on revising the entire manual to help explain some of the items that might still be a little unclear. I plan on loading this manual up with pictures taken from the UTBs here at the Systems center. Along with the existing written material, it will give you a visual reference that will hopefully make it a little easier.

I am hoping to have this completed and mailed with the next newsletter (1st QTR FY 98). Every unit that currently receives the newsletter will get a new copy, just like I did with the original. There are a few new things going on with the 41' UTB and they will also be incorporated in this new version. I should have a few extra copies at the office after this mass mailing and will continue to supply you with copies as needed. As before, it would be appreciated if you reproduce copies locally. The current manual will not become obsolete when this comes out, it will just become outdated.

Once again, thanks for all the input and keep those calls coming.

CURRENCY MAINTENANCE

By BMC John Buchanan

It has been about six month since Commandant (G-OCS-2) sent out ALDIST 102/97. I would like to take a few minutes to talk about some of the things we have been finding.

Currency maintenance, seems to be an easy thing to understand, however that's not what I'm seeing in the field. The most common mistake is the unit has no way of tracking where a boat crewman is in the currency process. As an Officer-in-Charge I should be able to find out how many AOR runs BM2 Anybody needs to keep his currency from lapsing. The next thing is the paper trail, I see a lot of unsigned letters or no letters at all. We all know if it's not on paper it never happened. The last big trend is the currency maintenance of the command. As an Officer-in-Charge, or senior Boatswain Mate at a unit with a Commanding officer, you are required, by COMDTINST M16114.9B, to be a certified Coxswain. That means you have to maintain your currency. It is not my plan to explain the whole currency maintenance procedure, COMDTINST M16114.9B already does just that. All I'm saying is, "Take a look at what you have."

I know a lot of you are waiting for the new RFO drills to hit the street, because I get asked all the time "Are we going to be responsible for the new drills?" As with anything else it takes time, but does that mean you aren't already responsible for being able to do a search pattern or handle an engine room fire? NO! If your training plan does not cover all the information in the Boat Crew Qualification guide, give us a call and we should be able to help. Keep an eye on the newsletters. We will let you know when these drills will be added.

Contrary to popular belief, the STANTEAM is here to help. We get a lot of phone calls about most any topic, so if you think your not all the way on line with currency or your training plan is missing something give us a call.

DRILL NOTES FROM THE FIELD

By BM1 Calvin (JED) Jones

MAN OVERBOARD (Three Man Boatcrew)

If your station is running with a three man boat crew and you experience a man overboard (MOB), the coxswain discovers he must leave the chair to help the one remaining crewman assist in retrieving the MOB. If you are in fact tending the crewman while he reaches out to grab the MOB, do not attempt to step over the crewman and try to get the MOB alone, or you may also end up in the water.

The Coxswain "C" school staff and the STANTEAM evaluators in the field, are recommending a direct pickup of an unconscious or injured person in the water. Once again, this is recommended for an unconscious person in the water.

This has been found to be the safest way to accomplish this task. Use these steps to improve the way you run this drill. Modify them, talk about the steps amongst yourselves, and try it.

COXSWAIN

1. MOB is reported by the crewmember.

2. Crewmember maintains sight of the MOB and continuously points, giving the coxswain distances to the hull.
3. Coxswain brings the throttles slowly to neutral.
4. Coxswain designates a pointer (if necessary).
5. Coxswain looks at the compass and gets the reciprocal of the present course.
6. The MOB function is enabled on the GPS.
7. Sound danger signal if there are other boats in the area.
8. Split the throttles and come around to the reciprocal course.
9. Evaluate the predominant force, and begin your approach as not to endanger the MOB. We tend to endanger the MOB when we do not allow for set and drift, and run the MOB over, or get him caught under the chine.
10. The first time the MOB should touch the hull is when you are ready to pick the MOB up at the well deck.

CREWMAN

If the coxswain pivots to the port, walk forward on the port side and stop at the window. Give the coxswain his reports from here. Once the MOB comes abeam of the window, the crewman will walk with the MOB aft to the well deck for the pickup.

Once the crewman has been designated the pointer, visual contact should be maintained. Breaking out unnecessary gear would cause you to take your eyes off the MOB. The only equipment that is recommended on deck is the kapok heaving line or the rescue ball. If conditions warrant, consider deploying the life ring both to assist the MOB and to help, if the need arises, to compute datum.

LETTERS FROM THE FIELD

When we travel to the units in the field, we always tell them to send us articles and we will publish them as is. Here is one such article, hopefully it will encourage others to do the same:

18 SEP 97

To: UTB Standardization Team
From: USCG Station Charleston
Subj: Jammed Rudder Towing Exercise.

Enclosed you will find a copy of the article we would like published in your next newsletter. We really appreciate the time you took to share some good ideas with us and our hats off to all of the knowledgeable and effective members of the training team that recently visited our unit. Again, thank-you and we hope to serve with you guys in the future.

Sincerely,

Joseph B. Abeyta, BM2

Greetings from Station Charleston! This letter is for any of our shipmates that would like to know of an excellent way to rig a double-leg bridle. The STANTEAM recently visited our station and encouraged us to pass our idea on through their newsletter (or they would take the credit).

Whenever we need to rig a double-leg bridle, we turn to the well known, but rarely used, "cat's paw." We use one of our mooring lines and tie a bowline with the bitter end. We then twist a cat's paw in the bridle and connect it to the tow line with a shackle. This is much easier to rig and breakdown. There's no hassle having to untie two bowlines that have been under strain and there's one less mooring used. We hope that this way proves to be as useful for you as it does for us.

We would also like to pass to all of the stations that have STANTEAM evaluations in the future...The STANTEAM personnel are experienced professionals, not monsters.

"Don't be scared, Be Prepared!"

MATERIEL INSPECTION JOB AID - ERROR SHEET

SUMMARY OF CHANGES

On page 2-4, Portable Fire Monitor, change the first line in the first paragraph to read **"For hull numbers 41363-41398, the fire monitor...."** and change the first line in the second paragraph to read **"For hull numbers 41300-41362 & 41399-41507, the fire monitor..."**

On page 4-3, AM Antenna and Deck Connector, change the first line to read **"A 23' AM antenna is mounted to the deck on the port side of the pilothouse."** The end of the sentence (between the water tank fill and the shore tie) is removed.

41' UTB STANTEAM FY97 Report Card

During FY97, the UTB STANTEAM visited 63 operational units and inspected 86 UTBs. The following report is a collective analysis of the inspections conducted by the UTB STANTEAM in fiscal year 97.

1. Of the 86 boats inspected, 2 (2%) were found Ready For Sea (RFS) upon the STANTEAM's arrival, while the remainder had restrictive deficiencies. Fifty (58%) of the boats in this category had their deficiencies corrected during the first day of the visit, while an additional 13 boats (15%) were made RFS by the end of the second day. The other 21 boats (24%) remained not RFS when the STANTEAM departed. Frequency of occurrence by restrictive deficiency for those boats not RFS by visit end (21 boats) is shown below, with the percentage they represent of the total number of boats inspected:

Restrictive Deficiencies (21 boat comparison to 86 inspected)	Frequency
Fuel Leaks	08 (09%)
Other fluid leaks	07 (08%)
RPMs under established parameters	07 (08%)
RPMs over established parameters	04 (05%)
Fresh water temperature under the established parameters	03 (03%)
Missing exhaust lagging	03 (03%)
Exhaust leaks	03 (03%)
Inoperative alarms/gauges	02 (02%)
Life raft overdue for the annual inspection	01 (01%)
Missing pyrotechnics	01 (01%)
Disabling casualty (engine failure)	01 (01%)

Major Deficiencies (based on 86 boats inspected)	Frequency
PTO angle bracket (missing or cracked)	23 (27%)
Coxswain chair (seat belt, cracks, repairs, etc.)	22 (26%)
Hot start wiring & junction boxes	19 (22%)
Fluid leaks less than 15 drops per minute	17 (20%)
Brackets loose/missing	16 (19%)
Scuttles mounted incorrectly	15 (17%)
Fuel tank gasket (incorrect type)	14 (16%)
Nonskid incorrect	14 (16%)
Turbocharger oil supply piped incorrectly	12 (14%)

Minor Deficiencies

The following represent the most commonly noted minor deficiencies in order of frequency of occurrence:

Structural cracks
Poorly maintained bilge spaces
Painting discrepancies
Old brackets that were not removed
Polished surfaces that should be painted
PTO locking device (nonstandard type)

Deficiencies which were corrected during the assessment visit were not included in the above information.

2. The following two boat alterations were done incorrectly on 79% of all boats inspected:

   BOATALT No. 45 (structural reinforcement): This BOATALT strengthened the center six longitudinals at Bulkheads 2 and 6 and the center three longitudinals at Frames 3, 4, and 5. This BOATALT is frequently done incorrectly at the bulkheads and overdone at the frames. This has transferred stress to other points, broadcasting a problem with cracked welds. The frequency of this discrepancy can be attributed to the wording of the BOATALT being misinterpreted. COMDT (G-SEN) is considering an amendment to the BOATALT.

   BOATALT No. 88 (mast configuration): This BOATALT changed the 41' UTB's mast significantly. While the discrepancies vary, common areas of deviation include ground strap configuration, junction box configuration, and side running light location.

3. The "Ready For Operations" (RFO) exercise statistics are as follows:

Description	Number of Drills	Satisfactory	Unsatisfactory
Basic Night Navigation	141	130	11 (7%)
Dewatering & Towing	167	156	11 (6%)
Person In Water (PIW)	141	132	9 (6%)